Figure 1

```
HSPDE1A     ----MGSSATEIEELENTTFKYLTGEQTEKMWQRLKGI---------LRCLVKQLERGDV 47
HSPDE1B     MELSPRSPPEMLEESDCPSPLELKSAPSKKMWIKLRSL---------LRYMVKQLENGEI 51
HSPDE1C     ----MESPTKEIEEFESNSLKYLQPEQIEKIWLRLRGLRKYKKTSQRLRSLVKQLERGEA 56
                   *..  .:** :. :    *      :*:* :*:.:          ** :*****.*:

HSPDE1A     NVVDLKKNIEYAASVLEAVYIDETRRLLDTEDELSDIQTDSVPSEVRDWLASTFTRKMGM 107
HSPDE1B     NIEELKKNLEYTASLLEAVYIDETRQILDTEDELQELRSDAVPSEVRDWLASTFTQQARA 111
HSPDE1C     SVVDLKKNLEYAATVLESVYIDETRRLLDTEDELSDIQSDAVPSEVRDWLASTFTRQMGM 116
            .:  :****:**:*::**:*******::*******.::::*:****************::

HSPDE1A     TKKKPEEKPKFRSIVHAVQAGIFVERMYRKTYHMVGLAYPAAVIVTLKDVDKWSFDVFAL 167
HSPDE1B     KGRRAEEKPKFRSIVHAVQAGIFVERMFRRTYTSVGPTYSTAVLNCLKNLDLWCFDVFSL 171
HSPDE1C     MLRRSDEKPRFKSIVHAVQAGIFVERMYRRTSNMVGLSYPPAVIEALKDVDKWSFDVFSL 176
              ::.:***:*:****************:*:*   ** :*..**:  **::* *.****:*

HSPDE1A     NEASGEHSLKFMIYELFTRYDLINRFKIPVSCLITFAEALEVGYSKYKNPYHNLIHAADV 227
HSPDE1B     NQAADDHALRTIVFELLTRHNLISRFKIPTVFLMSFLDALETGYGKYKNPYHNQIHAADV 231
HSPDE1C     NEASGDHALKFIFYELLTRYDLISRFKIPISALVSFVEALEVGYSKHKNPYHNLMHAADV 236
            *:*:.:*:*: :.:**:**::**.*****   *::* :***.**.*:****** :*****

HSPDE1A     TQTVHYIMLHTGIMHWLTELEILAMVFAAAIHDYEHTGTTNNFHIQTRSDVAILYNDRSV 287
HSPDE1B     TQTVHCFLLRTGMVHCLSEIELLAIIFAAAIHDYEHTGTTNSFHIQTKSECAIVYNDRSV 291
HSPDE1C     TQTVHYLLYKTGVANWLTELEIFAIIFSAAIHDYEHTGTTNNFHIQTRSDPAILYNDRSV 296
            *****  :: :**: :.*:*:*::*::*:************.*****:*: **:******

HSPDE1A     LENHHVSAAYRLMQEEE-MNILINLSKDDWRDLRNLVIEMVLSTDMSGHFQQIKNIRNSL 346
HSPDE1B     LENHHISSVFRLMQDDE-MNIFINLTKDEFVELRALVIEMVLATDMSCHFQQVKTMKTAL 350
HSPDE1C     LENHHLSAAYRLLQDDEEMNILINLSKDDWREFRTLVIEMVMATDMSCHFQQIKAMKTAL 356
            *****:*:.:**:*::* ***:***:**:: ::* ******::**** ****:* ::.:*

HSPDE1A     QQPEGIDRAKTMSLILHAADISHPAKSWKLHYRWTMALMEEFFLQGDKEAELGLPFSPLC 406
HSPDE1B     QQLERIDKPKALSLLLHAADISHPTKQWLVHSRWTKALMEEFFRQGDKEAELGLPFSPLC 410
HSPDE1C     QQPEAIEKPKALSLMLHTADISHPAKAWDLHHRWTMSLLEEFFRQGDREAELGLPFSPLC 416
            ** * *::.*::**:**:******:* * :* *** :*:**** ***:************

HSPDE1A     DRKSTMVAQSQIGFIDFIVEPTFSLLTDSTEKIVIPLIEEASKAETS-------SYVASS 459
HSPDE1B     DRTSTLVAQSQIGFIDFIVEPTFSVLTDVAEKSVQPLADEDSKSKNQP----SFQWRQPS 466
HSPDE1C     DRKSTMVAQSQVGFIDFIVEPTFTVLTDMTEKIVSPLIDETSQTGGTGQRRSSLNSISSS 476
            **.**:*****:***********::*** :** * ** :* *::              .*

HSPDE1A     STTIVGLHIA---------------DALRRSNTKGSMSDGSYSPDYSLAAVDLKSFKNNL 504
HSPDE1B     LDVEVGDPNP---------------DVVSFRSTWVKRIQENKQKWKERAASGITNQMS-- 509
HSPDE1C     DAKRSGVKTSGSEGSAPINNSVISVDYKSFKATWTEVVHINRERWRAKVPKEEKAKKEAE 536
                  *  .               *      *  . . . .    ..  .   . .

HSPDE1A     VDIIQQNKERWK--ELAAQEARTSSQKCEFIHQ--------------------------- 535
HSPDE1B     IDELSPCEEEAP--PSPAEDEHNQNGNLD------------------------------- 536
HSPDE1C     EKARLAAEEQQKEMEAKSQAEEGASGKAEKKTSGETKNQVNGTRANKSDNPRGKNSKAEK 596
             .    :*.         ::  .  . : :

HSPDE1A     ----------------------------------------               (SEQ ID NO:22)
HSPDE1B     ----------------------------------------               (SEQ ID NO:3)
HSPDE1C     SSGEQQQNGDFKDGKNKTDKKDHSNIGNDSKKTDDSQE 634             (SEQ ID NO:23)
```

Figure 4A N-terminal sequences of PDE1A splice variants

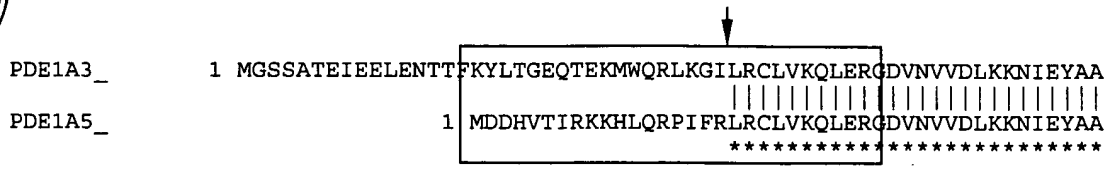

Figure 4B N-terminal sequences of PDE1B splice variants

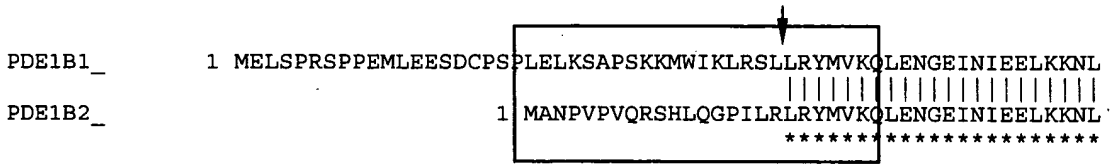

Figure 4C Comparison of the CaM binding domains of the PDE1A1 and PDE1B2 splice variants

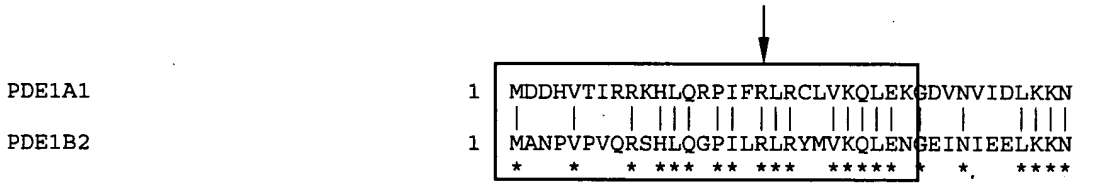

Figure 4D Comparison of the CaM binding domains of the PDE1A2 and PDE1B1 splice variants.